

REMARKS

Status Of The Claims

Claims 1, 3-5, 7-9, 11-14 and 16-18 are pending in the application.

Claims 1, 3-5, 7-9, 11-14 and 16-18 stand rejected.

The Amendment

Claims 1, 3, 4, 5, 7, 8, 12 and 17 have been canceled without prejudice.

Claims 9 and 14 have been amended to recite the limitations of canceled claim 1 and to include cherry and eucalyptus as named flavoring agents. The claims have been further amended to specify the effective amounts of enhanced flavoring composition present in the claimed confectionery composition and chewing gum respectively.

Claims 11 and 16 were amended to recite cherry.

Claims 13 and 18 have been amended to change their dependency from canceled claims 12 and 17 respectively.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment.

The First Rejection Under 35 U.S.C. 103(a)

The Examiner has rejected claims 1, 4, 5, 8, 14, 17 and 18 under 35 U.S.C. 103(a) as obvious over Record et al. (US 5,372,824). The Examiner holds as follows:

Record et al. disclose the combination of flavor and N-ethyl-p-menthane-3-carboxamide in the amounts claimed for use in chewing gums (see entire patent). The claims differ as to enhancement and the specific flavors. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use any flavor in that of Record et al. because the choice of flavor is seen to be no more than a matter of choice and well within the skill of the art. Applicant attaches no criticality to the flavor and discloses fruit, herbal, and spice flavors and specifically states that "other flavors known to those skilled in the art may also be enhanced" (see page 4, second full paragraph). Enhancement would be obvious to that of Record et al. as the same components are use.

Claims 1, 4, 5, 8 and 17 have been canceled herein. The Examiner is respectfully requested to reconsider and withdraw the rejection of the claims 14, and 18 drawn to chewing gum compositions, as amended herein, for the reasons as follow.

Applicants claimed invention, as amended herein, concerns confectionery compositions and chewing gums which contain a flavoring effective amount of an enhanced flavoring composition comprising at least one flavoring agent selected from the group consisting of lemon, orange, lime, apricot, grapefruit, banana, cherry, apple, pineapple, grape, strawberry, tutti frutti, fruit punch, cinnamon, anise, coriander, eucalyptus, ginseng, fennel, honey, caramel, toffee, molasses, nutmeg, pepper, cinnamon, caramon, ginger and clove, and further comprises an amount of N-ethyl-p-menthane-3-carboxamide effective to enhance the flavoring agent wherein the N-ethyl-p-menthane-3-carboxamide is present at about 0.04 to about 2.2 % by weight of the enhanced flavoring composition and wherein, for confectionery compositions, the enhanced flavoring composition is present at about 0.10% to about 1.0% by weight of said confectionery composition and, for chewing gums, is present at about 0.8% to about 3.5% by weight of the chewing gum.

N-ethyl-p-menthane-3-carboxamide is a known cooling agent. It is often used in compositions with menthol, also a known cooling agent, to enhance the cooling and negate the bitterness of the latter. Menthol is also used in products having mint flavor as it comprises approximately 50% of peppermint oil and is present whenever peppermint oil is used. There is no prior art teaching to the combination of N-ethyl-p-menthane-3-carboxamide with flavorants absent the presence of a mint flavorant and/or menthol in its capacity as a flavorant nor any prior art suggestion that said combination would be useful.

Record et al. (US 5,372,824) teach mint-flavored chewing gums having reduced bitterness. Bitterness from the menthol in mint-flavored gums will occur in the latter part of chewing when the sweeteners have been dissipated. The reduced bitterness is achieved by reducing the amount of l-menthol in the peppermint oil used as the mint flavoring agent. An embodiment of the invention teaches the addition of cooling agents to the l-menthol-reduced flavoring agent in order to add back some of the cooling effect lost with the l-menthol reduction. Since the Record et al. teaching inherently only concerns peppermint oil, i.e., mint flavorant use, any teaching or suggestion regarding non-mint flavoring agents can only be incidental. A search of the teaching shows that there are no (comparative) chewing gum examples to a product not containing a mint flavorant.

Further, there is no suggestion, nor any teaching in Record et al. that the cooling agents enhance the mintiness of the mint flavors taught therein. The amounts in which the cooling agents are used in the Record et al. invention relative to the menthol flavor are in fact distinctly higher than that taught and claimed by applicants. Applicants claim a product wherein the enhanced flavorant has N-ethyl-p-menthane-3-carboxamide present in an amount which is from about 0.04% to 2.2% by weight of the flavor used. Record et al. teach the use of N-ethyl-p-menthane-3-carboxamide in two examples, Flavor No. 2 and Example 3A. In these examples N-ethyl-p-menthane-3-carboxamide is present at 3.32% and 2.35% respectively of the total mint flavor. (If one compares the presence of the N-ethyl-p-menthane-3-carboxamide to the eucalyptus oil which is used in the cooling flavor being illustrated in the examples, the N-ethyl-p-menthane-3-carboxamide is 94.6%

and 91.1% of the combination respectively.) This usage range of N-ethyl-p-menthane-3-carboxamide as a cooling agent when combined with menthol does not at all suggest the claimed gum products wherein N-ethyl-p-menthane-3-carboxamide is present at 0.04% to 2.2% for enhancement of the specific flavor.

The Examiner has also stated that "Applicant attaches no criticality to the flavor and discloses fruit, herbal, and spice flavors and specifically states that "other flavors known to those skilled in the art may also be enhanced" (see page 4, second full paragraph)". This is not correct. At page 4, second paragraph applicants state

Flavors contemplated herein include but are not limited to fruit flavors such as berry, citrus, tropical fruit flavors and the like; herbal such as cinnamon, anise, coriander, eucalyptus, ginseng, fennel and the like; sweet such as honey, caramel, toffee, molasses and the like; and spice such as nutmeg, pepper, cinnamon, caramon, ginger, clove and the like. Other flavors known to those skilled in the art may also be enhanced by the use of low levels of N-ethyl-p-menthane-3-carboxamide.

Applicants have used language, i.e., "include but are not limited to" and "other flavors known", so as to encompass any equivalents to the literally named fruit, herbal, sweet and spice flavors. Applicants do not include mint flavors in the named flavors, either explicitly nor implicitly. Applicants therefore have attached criticality to the flavor type.

In view of the above, the Examiner is respectfully requested to withdraw the rejection of claims 14, and 18, as amended, under 35U.S.C. 103(a) as obvious over Record et al.

The Second Rejection Under 35 U.S.C. 103(a)

The Examiner has rejected claims 1, 3-5, 7-9, 11-14 and 16-18 under 35 U.S.C. 103(a) as being obvious over Cherukuri et al. (US 5,009,893). The Examiner states her position as follows:

Cherukuri et al. disclose the combination of a flavor (e.g., mint and cherry) and N-ethyl-p-menthane-3-carboxamide in amounts claimed for use in chewing gums and confections (see entire patent). The claims differ as to enhancement and the specific flavors. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use any flavor in that of Cherukuri et al. because the choice of flavor is seen to be no more than a matter of choice and well within the skill of the art. Applicant attaches no criticality to the flavor and discloses fruit, herbal, and spice flavors and specifically states that "other flavors known to those skilled in the art may also be enhanced" (see page 4, second full paragraph). Enhancement would be obvious to that of Cherukuri et al. as the same components are used. In the absence of unexpected results it is not seen how the claimed invention differs from the

teachings of the prior art. Applicants' claims are drawn to a combination of known components which produce unexpected results, see *In re Kerkhoven* 205 USPQ 1069 and *In re Gershon* 152 USPQ 602.

Claims 1, 4, 5, and 8 have been canceled herein. The Examiner is respectfully requested to reconsider and withdraw the rejection of the claims as amended for the reasons as follow.

Applicants' claimed invention, as discussed above, as amended herein, concerns confectionery compositions and chewing gums which contain a flavoring effective amount of an enhanced flavoring composition comprising at least one flavoring agent selected from the named group, and further comprises an amount of N-ethyl-p-menthane-3-carboxamide effective to enhance the flavoring agent wherein the N-ethyl-p-menthane-3-carboxamide is present at about 0.04 to about 2.2 % by weight of the enhanced flavoring composition and wherein, for confectionery compositions, the enhanced flavoring composition is present at about 0.10% to about 1.0% by weight of said confectionery composition and, for chewing gums, is present at about 0.8% to about 3.5% by weight of the chewing gum. N-ethyl-p-menthane-3-carboxamide is a known cooling agent. It is often used in compositions with menthol, also a known cooling agent, to enhance the cooling and negate the bitterness of the latter. Menthol is also used in products having mint flavor as it comprises approximately 50% of peppermint oil and is present whenever peppermint oil is used. There is no prior art teaching to the combination of N-ethyl-p-menthane-3-carboxamide with flavorants absent the presence of a mint flavorant and/or menthol in its capacity as a flavorant nor any prior art suggestion that said combination would be useful.

Cherukuri et al teach combinations of menthol and carboxamides to be utilized as cooling agents. Cherukuri et al., as with Record et al., concerns the known use of the carboxamides, i.e., as cooling agents. The preferred ratio is from about 5% to about 70% by weight menthol and about 30% to about 95% by weight of N-ethyl-p-menthane-3-carboxamide in the combination. The apparent goal, as with Record et al., was to reduce the bitterness associated with the use of menthol as a cooling agent in mint flavored compositions. While Cherukuri et al. do not state that the invention only concerned the improvement of mint flavors as Record et al. did, Cherukuri et al. do state that the problem that they were correcting was found only in mint flavor use since as noted above, menthol provides a bitterness together with its cooling effect and approximately 50% of natural peppermint oil is menthol. No other flavoring agents are taught by Cherukuri et al. The only example which contains a flavor agent absent menthol is a comparative example. That example (Example 3, Table V at #3) combined N-ethyl-p-menthane-3-carboxamide with a cherry flavor in a candy composition. The amount of the combined flavorants is 1.9% of the candy composition. No cooling effect was found in the cherry flavored candy absent the presence of menthol. (In example V#4, which combines menthol with the cherry, the amount of flavorant used in the candy for effect increases to 2.4% of the candy composition.). No similar comparative example is given for chewing gums.

The Examiner holds that "Cherukuri et al. disclose the combination of a flavor (e.g., mint and cherry) and N-ethyl-p-menthane-3-carboxamide in amounts claimed for use in chewing gums and confections (see entire patent). The claims differ as to enhancement and the specific flavors." This is not correct. Firstly, as stated above, Cherukuri et al. do not provide any teaching concerning chewing gums having other than a mint flavor. Those chewing gums taught by Cherukuri et al. contain 4% or greater N-ethyl-p-menthane-3-carboxamide of the combination with menthol. Applicants claimed invention claims an effective amount of about 0.04% to 2.2% of N-ethyl-p-menthane-3-carboxamide by weight of the enhanced flavoring composition.

Secondly, wherein Cherukuri et al. teach a confectionery composition containing a cherry flavor that amount of flavorant differs significantly from the amount used by applicants in their claimed confectionery composition. As stated above, the amount of the combined flavorants in Example V#3 in which no menthol is used is 1.9% of the candy composition. In example V#4, which combines menthol with the cherry, the amount of flavorant used in the candy for effect increases to 2.4% of the candy composition. This usage range does not suggest the claimed confectionery composition wherein the enhanced flavorant is found effective at about 0.10% to 1.0% by weight of the confectionery composition

Thirdly, as applicants have pointed out in the prior section applicants do attach criticality to the flavor type. Applicants use language in the specification so as to encompass any equivalents to the named fruit, herbal, sweet and spice flavors. Applicants do not include mint flavors in the named flavors, either explicitly nor implicitly.

Cherukuri et al. therefore cannot be held to suggest applicants' claims. Applicant claims require a non-mint flavorant, a particular ratio of flavorant to N-ethyl-p-menthane-3-carboxamide, and an amount of that enhanced flavorant in the claimed product. There is no suggestion of a useful product containing other than a mint flavorant. The only non-mint example, cherry, leads away from combining N-ethyl-p-menthane-3-carboxamide with the flavorant. One would not be led to the claimed enhanced non-mint flavorants.

In view of the above, the Examiner is respectfully requested to withdraw the rejection of claims 9, 11, 13, 14, 16, and 18, as amended, under 35 U.S.C. 103(a) as obvious over Cherukuri et al.

Conclusion

In view of the above applicants believe all of the claims in this application are in condition for allowance. If any questions remain, the resolution of which would be advanced by conference (telephonic or personal) with applicants' agent, the Examiner is invited to contact said agent at the telephone or the fax number noted below.

Respectfully submitted,
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Date: Aug 24, 2001

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Attachment: VERSION WITH MARKINGS TO SHOW CHANGES MADE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 9 (amended)

A confectionery composition containing a flavoring effective amount of [the] an enhanced flavoring composition [of claim 1] said flavoring composition comprising
(a) at least one flavoring agent selected from the group consisting of lemon, orange, lime, apricot, grapefruit, banana, cherry, apple, pineapple, grape, strawberry, tutti frutti, fruit punch, cinnamon, anise, coriander, eucalyptus, ginseng, fennel, honey, caramel, toffee, molasses, nutmeg, pepper, cinnamon, caramon, ginger and clove, and,
(b) an amount of N-ethyl-p-menthane-3-carboxamide effective to enhance said flavoring agent wherein said N-ethyl-p-menthane-3-carboxamide is present at about 0.04 to about 2.2 % by weight of said enhanced flavoring composition, and;
wherein said enhanced flavoring composition is present at about 0.10% to about 1.0% by weight of said confectionery composition.

Claim 11 (thrice amended)

The confectionery composition according to claim 9 wherein said flavoring agent is lemon, orange, lime, apricot, grapefruit, banana, cherry, apple, pineapple, grape, strawberry, tutti frutti, fruit punch.

Claim 14 (amended)

A chewing gum containing a flavoring effective amount of [the] an enhanced flavoring composition [of claim 1] said flavoring composition comprising
(a) at least one flavoring agent selected from the group consisting of lemon, orange, lime, apricot, grapefruit, banana, cherry, apple, pineapple, grape, strawberry, tutti frutti, fruit punch, cinnamon, anise, coriander, eucalyptus, ginseng, fennel, honey, caramel, toffee, molasses, nutmeg, pepper, cinnamon, caramon, ginger and clove, and,
(b) an amount of N-ethyl-p-menthane-3-carboxamide effective to enhance said flavoring agent wherein said N-ethyl-p-menthane-3-carboxamide is present at about 0.04 to about 2.2 % by weight of said enhanced flavoring composition, and;
wherein said enhanced flavoring composition is present at about 0.8% to about 3.5%. by weight of said chewing gum.

Claim 16 (thrice amended)

The chewing gum according to claim 14 wherein said flavoring agent is lemon, orange, lime, apricot, grapefruit, banana, cherry, apple, pineapple, grape, strawberry, tutti frutti, fruit punch.

Claims 1, 3, 4, 5, 7, 8, 12 and 17 have been canceled without prejudice.

The dependency of claim 13 was changed from claim 12 to claim 9 and the dependency of claim 18 was changed from claim 17 to claim 14.